



Owner's Manual

PAH1280
PAH1580



www.pyleaudio.com

Introduction

Thank you for purchasing this Pyle Pro PAH series speaker. The loudspeaker is designed to provide you years of high performance in any application that you require. Please read this manual carefully to fully maximize the performance of the speaker.

Maintenance and Safety

- Do not expose the speaker to moisture.
- Avoid hot and cold temperature extremes.
- Clean using a damp cloth. Make sure that no moisture contacts the drivers.
- Do not attempt to service the unit. Refer service to a certified Pyle Pro technician.
- This loudspeaker is capable of producing extremely high SPL levels. Use earplugs when necessary.

Features

The PAH series features high-level drivers and rugged components and is designed for high-performance applications.

The cabinet features heavy-duty construction with reinforced corners. The integrated handles have been carefully selected for their ergonomic design and durability.

Both models are loaded with a premium Kapton voice coil woofer and exhibit excellent bass response. The compression driver provides warm midrange reproduction and crystal clear highs.

The integrated passive crossover network is assembled using quality components and efficiently directs the frequencies to the proper drivers.

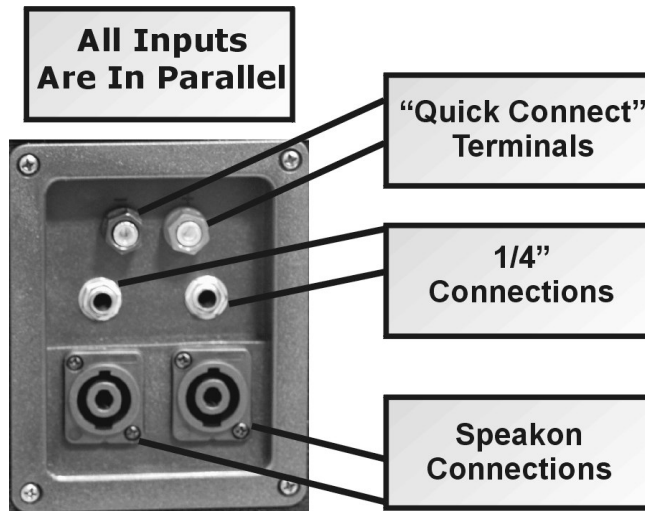


There is a flush mounted 35mm speaker stand adapter on the bottom side of the cabinet.



Connections

Your PAH series speaker has an extremely flexible connection panel. There are two Speakon jacks as well as two 1/4" jacks. You can also hookup your speaker cabinet using the "Quick Connect" speaker terminals, which accommodate either wire leads or a banana plug. The jacks are wired in parallel, which allows you to daisy chain additional speakers. Thus you can use one amplifier channel to power multiple speakers.



Make certain that the wires you are using are at least 12 gauge unshielded speaker cable (the lower the number, the thicker the wire). Do not use shielded "instrument" cables.

➡ ***Hooking speakers up in parallel decreases the overall impedance, placing a greater load on the amplifier. Check your amplifier's specifications to ensure that you are not overloading the channel.***



CAUTION: DO NOT USE MORE THAN ONE JACK AS AN AMPLIFIER INPUT. DOING SO WILL DAMAGE THE SPEAKER!

Amplifier Requirements

Check the product specifications (page 5) to see the power handling for your model. There are a couple of considerations to keep in mind when

choosing an amplifier to drive your PAH series speaker. While it is true that an amplifier with a higher power rating can damage the drivers, under-powering can be even more dangerous. When an amplifier is overdriven and starts distorting, it generates transient frequencies that are much louder than the program material. These wayward frequencies could damage your speaker. A proper match is an amplifier which could drive the speaker up to the cabinet's RMS rating, without exceeding the amplifier's own RMS level.

Operation

When powering on your equipment, make sure the volume level on the amplifier is turned all the way down. This is to avoid the "popping" noise, which could damage your speaker.

The placement of speakers can be a bit tricky. Besides for the practical considerations, there are acoustic issues as well. Avoid placing the speaker in a corner, as this will cause the low frequencies to sound "muddy". Similarly, but to a lesser degree, placing the speaker directly against the wall will exaggerate the low frequencies. You should therefore try to place your speaker so that it is a few feet away from the wall.

High frequencies are unidirectional while low frequencies are omnidirectional. Being that this is a full range enclosure, it is important that the speaker be placed so that the high frequencies reach the intended listeners properly. Make certain that no person or object could come to interrupt the line-of-site between the loudspeaker and the audience.

When using more than one loudspeaker, you have to account for phase alignment. When the speakers are close together this is not usually an issue. However, when they are far apart, the sound from one speaker may reach the ear a fraction of a second before the other. This will cause certain frequencies to cancel out, resulting in a hollow sound. To avoid this, you may have to use a delay processor to align the sound from the speakers.

Troubleshooting

No Sound:

- ✓ Check connections
- ✓ Try a different speaker cable
- ✓ Check levels on amplifier
- ✓ Confirm amplifier is getting a signal (check signal LED, or use headphone output)

Intermittent Output:

- ✓ Check connections
- ✓ Try a different speaker cable

Weak Bass:

- ✓ Check the polarity of the speaker connection. It may be reversed.
- ✓ Listen with headphones to confirm the amplifier is being sent a good signal.

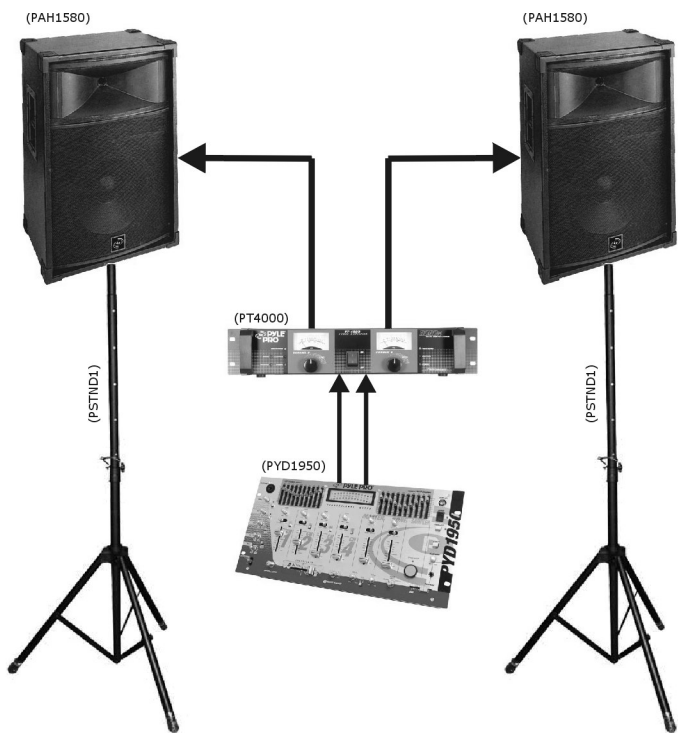
Distorted Sound:

- ✓ Check if the amplifier is overdriven. If it is, you will have to turn the level down.
- ✓ Make sure you are not exceeding the RMS rating of your speaker.

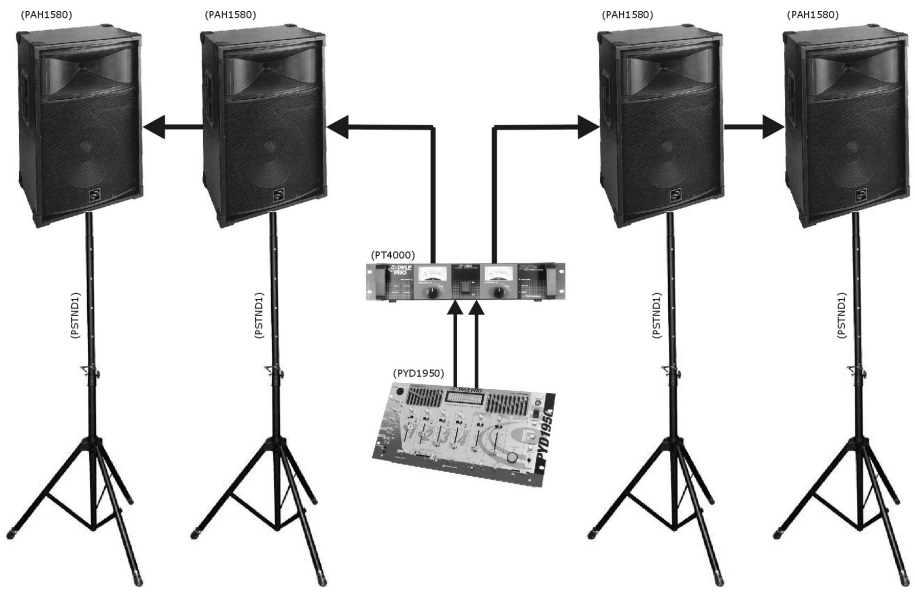
Specifications

Model	Woofers	Compression Driver	Frequency Range	RMS	Peak	Sensitivity (1w/1m)	Connections	Ω	Dimensions	Weight
PAH1280	12" Kapton Voice Coil	10" x 18" Titanium Super Horn Midrange/Tweeter	25-22 kHz	300W	600W	96 dB	Speakon (2) ¼" (2) "Quick Connect" (Wire Lead & Banana)	8 Ω	W = 17.5" D = 15" H = 27"	54 lb.
PAH1580	15" Kapton Voice Coil	10" x 18" Titanium Super Horn Midrange/Tweeter	20-22 kHz	400W	800W	98 dB	Speakon (2) ¼" (2) "Quick Connect" (Wire Lead & Banana)	8 Ω	W = 20" D = 15.8" H = 29.5"	65 lb.

Typical Setup



Parallel Setup



Recommended Accessories



PSTND1

- Loading Capacity: 100 lbs.
- Tubing Diameter: 1.5"
- Black Anodized Stand
- Telescopes To Six Feet

PT Series Amplifiers

- Professional High-Power amplifiers
- 8 Models to choose from
- All models rack-mountable in standard ISO 19" rack



PPJJ30

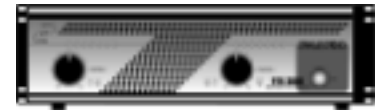
- 30ft. 12 Gauge
- Professional Speaker Cable
- 1/4" to 1/4"

PZR Series Amplifiers

- Professional High-Power amplifiers
- 3 Models to choose from
- All models rack-mountable in standard ISO 19" rack

PPJJ15

- Same as above 15ft.



PPSS30

- 30ft. 12 Gauge
- Professional Speaker Cable
- Speakon to Speakon

PDMK101

- (2) 21 ft. 12 Gauge Cable
- Speakon to Speakon
- Carrying Bag
- Telescopes to Six Feet
- Loading Capacity 100 lbs.

PPSS15

- Same as above 15ft



PPSJ30

- 30ft. 12 Gauge Professional
- Speaker Cable
- Speakon to 1/4"



PPSJ15

- Same as above 15ft.

Check out these and other accessories at www.pyleaudio.com